

MADERA COUNTY

HEAVY EQUIPMENT MECHANIC

DEFINITION

Under general supervision, to perform a variety of skilled inspection, diagnosis, maintenance, servicing, and repair work on heavy, road, and bridge maintenance and construction equipment; and to do related work as required.

SUPERVISION EXERCISED

Exercises no supervision.

DISTINGUISHING CHARACTERISTICS

This is the journey level in the Heavy Equipment Mechanic class series. Positions at this level are expected to skillfully operate a variety of machinery and diagnostic equipment as well as perform the full range of maintenance assignments, working independently and exercising judgment and initiative. Positions receive only occasional instruction or assistance as new or unusual situations arise.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Inspects, locates, and diagnoses mechanical defects on County heavy, road, and bridge maintenance and construction equipment; determines the extent of necessary repairs; overhauls, repairs, and adjusts transmissions, differentials, clutches, and engines; tunes-up engines, replacing ignition parts and cleaning and adjusting carburetors and fuel injection systems; replaces or repairs faulty parts including wheel bearings, oil seals, shock absorbers, exhaust systems, steering mechanisms, and other parts and equipment; repairs and replaces components including generators, distributors, relays, lights, and switches; performs front-end alignments and repairs; performs welding work to adapt and fabricate parts and equipment; works on hydraulic lines and systems; performs specialized repairs on air brakes, diesel engines, and drive mechanisms; carries out preventive maintenance programs; makes field and emergency repairs as necessary; maintains records on time and materials used; road tests repaired equipment; replaces flat tires; assists with cleaning up the shop and work areas; steam cleans equipment and parts.

OTHER JOB RELATED DUTIES

Performs related duties and responsibilities as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Methods, tools, materials, and equipment used in heavy, road, and bridge equipment maintenance and repair.
Principles and methods of gas and electrical welding.
Operation and care of internal combustion and diesel engines and components.
Principles and methods of preventive maintenance.
Safe work practices.

Skill to:

Operate a variety of hand and power tools in heavy equipment inspection, testing, and repair work safely and skillfully.
Operate a motor vehicle safely.

Ability to:

Inspect heavy, road, and bridge equipment to locate mechanical defects.
Diagnose mechanical problems and determine corrective procedures.
Estimate time and materials needed for repair work.
Perform electrical and gas welding.
Understand and carry out oral and written directions.
Communicate clearly and concisely, both orally and in writing.
Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Experience and Training Guidelines:

Any combination equivalent to experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Two years of responsible work experience in performing skilled maintenance and repair work on heavy equipment.

Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in heavy equipment maintenance and repair principles and practices.

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

Special Requirements:

Essential duties require the following physical skills and work environment:

Ability to sit, stand, walk, kneel, crouch, stoop, squat, twist, climb, and lift 50 lbs.; exposure to cold, heat, noise, outdoors, vibration, chemicals, explosive materials, mechanical hazards, and electrical hazards.

Effective Date: May, 1995